WORLD’S FIRST ONE WRIST ECG BAND

$141B MARKET INVESTMENT OPPORTUNITY FROM EUROPE’S FASTEST GROWING BIOTECH COMPANY
Planexta addressing the group of healthcare markets that will hit $141 Billions by 2020 with unique and highly demanded technologies:

- World’s first one-wrist ECG band
- Instrumental Online Diagnostics
- CardioCloud Service
- Endovenous Electric Welding

Planexta solutions are easily scalable, bring instant revenue, have numerous revenue streams.
HRV (Heart Rate Variability) analysis

is an established method of monitoring for various health parameters: cardiovascular, respiratory, muscular, nervous and glandular systems, emotional state, immunity factors, stress, circadian rhythm, signs of ageing, etc. It might even save your life by alerting about upcoming heart attack.

But in order to make accurate conclusions the measuring must be extremely precise and performed on a regular basis. That was limiting its usage to clinical environment.

Its benefits in full were available only to astronauts and pro-athletes.

We are bringing it to consumer market
**SenceBand™** - the world’s first ECG wearable for 1 hand

**Status:** TRL6 prototype

**Main purpose:** constant HRV monitor

**Medical indications:** early diagnostic of CV diseases (including early detection of Myocardial infarction and prediction of sudden cardiac death), mortality prediction in peritoneal dialysis patients, evaluation of diabetes mellitus progress, alcohol consumption control and prediction of liver diseases development, stress resistance and psychological state control, pain control and other heart rate variability approaches.

*SenceBand™* is selected as a CES 2017 Innovation Awards HONOREE in the Wearable Technologies product category.

*SenceBand™* is selected as a CES 2017 Innovation Awards HONOREE in the Fitness, Sports and Biotech product category.
HealthWatch - the world’s first smartwatch with medical grade blood pressure monitor and ECG-based HRV monitor

**Status:** TRL3 prototype

**Main purpose:** constant monitor of vital parameters

**Medical indications:** medical grade cuffless blood pressure (systolic, mean, diastolic) measurements and monitoring, medical grade heart rate measurements, resting Heart Rate abnormalities (bradycardia, tachycardia), Pulse Zone detection while training, HRV analysis, body temperature measurements, blood oxygen level measurements
Planexta Inc. created

world’s first one-wrist ECG band

that performs HRV analysis with the same accuracy as hospital grade electrocardiograph. It measures >80 health parameters and helps you to get yourself into peak health state, both physical and mental.

Live long (+5 years on average) and prosper!
**Planexta Technologies**

- World’s first one-wrist ECG band and 5-product lineup of specialised bands on its base
- Instrumental Online Diagnostics
  - Telemedicine Consulting Service
- CardioCloud
  - Data Analysis Service
- Endovenous electro-welding technology

**Markets**

- **Health & Fitness Wearables**
  - 3.8B market by 2020, CAGR 20%
- **Connected Healthcare**
  - 117B market by 2020 (Forbes), CAGR 36%
- **Electronic Health Records**
  - (21B market by 2020, CAGR 43%)
- **Endovenous Vascular Surgery**
  - (Potential 29B market by 2020)
WHY WE WILL SUCCEED

**Team**
driven by very successful entrepreneurs and prominent medical professionals

**Extensive experience**
in bringing products to European, North American and Canadian markets

**Own R&D lab**
enables us to deliver super-fast results

**Own fund**
to attract large scale projects, such as United Nations cardio-screening programs

**8 products in pipeline,**
6 of them for both consumer and enterprise markets

**Extremely high demand:**
we’ve already signed a number of partnerships with world’s leading health companies and organisations

**Way ahead of the competition**
Launching with industry’s best offers

**Pre-order for 50,000 pcs**
for our first wristband from CIS largest electronics dealer
World’s first one-wrist ECG band

Unique technology, no direct competitor.
We succeeded where many better funded companies was unable to deliver so far. Including Google.

Helps you to get yourself into peak health state, both physical and mental. It could even alert about conditions that have not yet manifested themselves, including upcoming heart stroke.
Alternative options have very limited application:

**FitPal patch** (not yet available) requires sticking it to the chest or stomach and positioned solely as a fitness gear.

**AliveCor wristband for Apple Watch** (awaiting FDA approval) requires pressing finger in order to receive data, so no continuous monitoring.

**BioPac** doesn’t make consumer devices.

All the rest (Samsung, Fitbit, etc.) measure not the electric impulses but simply pulse, which does not provide comparable data and precision.
Planexta enters the market with the absolute best solutions in every sector.

We are going to win all relevant contests and competitions and get massive publicity: CES Awards, RedDot Award, MedTech Award, etc.

Besides traditional marketing channels we are working on cooperation with international healthcare organisations to solve the socially significant tasks.
No more “How do you feel today?” questions. The doctor knows best

Planexta ECG wristband measures 68 health parameters with the same accuracy as hospital grade electrocardiograph. Combined with telemedicine service, it enables doctor to monitor patient’s health status remotely on a whole new level.
So how am I doing, Doctor?

I see your pain level decreased 42% and your stress index is 75% better!

Status: under development
Currently available options:
there are plenty of them.

But our solution takes the whole industry to the next level:

- It is wearable, this opens the opportunity of dynamic long-term monitoring and possibility to focus on prevention
- Delivers more complete analysis
- Has added benefit of continuous blood pressure measurement
PLANEXTA INSTRUMENTAL ONLINE DIAGNOSTICS: MARKETING AND GROWTH STRATEGY

- **Territorial business development** with gradual market penetration.
- **Direct sales** to doctors.
- **Partnership programs** with medical service providers and insurance companies.
WHAT IS IT?

PLANEXTA CARDIO CLOUD IS A GAME CHANGING CLOUD SERVICE

- Most accurate ECG interpretation tool
- Constant access to the updated medical standards of ECG diagnostic
- Constant access to any referent cardiological centres for second opinion
- Remote care and telemedical tool
- Universal ‘brains’ for any ECG machine
UNIVERSAL INPUT RECOGNITION

THE CARDIO CLOUD CAN RECOGNISE ANY ECG STORAGE FORMAT

- SCP-ECG
- DICOM-WS 30
- HL7 aECG
- ecgML
- MFER
- Philips XML
- XML-ECG
- mECGml
- ecgAware

So you can use any available ECG equipment
READY FOR INTEGRATION TO ANY HL7-COMPATIBLE HOSPITAL INFORMATION OR ELECTRONIC HEALTH RECORD SYSTEMS

Directive 95/46/EC  IEC 62304
LEVEL 1

- P wave, QRS complex, ST-T wave detection
- Wave inversion detection
- PR interval, QRS complex, QT interval, RR interval, PP interval durations and segment voltages calculated; for each in the sequence and average ones
- Abnormal complexes detection and indication
- Markup implementation in accordance with aECG standard:
  - Reference Event - an event defined to which relative time points are anchored [e.g. a meal, a drug dosage, etc. ]
  - Relative Time Point – a time point relative to the reference event [e.g. 30 minutes post dosage]
  - ROI – Region Of Interest, used to define a region within an ECG series
- U-wave detection
- J-point detection
- Delta Wave detection
MULTILEVEL ANALYSIS

LEVEL 2

- Heart Rate obtained
- HR abnormalities evaluated for regularity:
  • regular [e.g., paroxysmal supraventricular tachycardia]
  • regular irregularity [e.g., ventricular bigeminy]
  • irregular irregularity [e.g., atrial fibrillation]
  • irregular [e.g., multifocal premature ventricular contractions]
- normal/short/prolonged PR interval
- normal/prolonged QRS duration
- normal/prolonged QT interval
- ST segment elevation detection
- Heart Rate Variability parameters:
  **Time domain:** SDNN, SDANN, RMSSD, SDNN index, SDSD, pNN50, HRV triangular index, TINN
  **Frequency domain:** Total Power, VLF, LF, HF, LF/HF
- Wave form analysis: symmetry, deformations, etc.
- Abnormal rhythm: site of origin, rate, active/passive onset
- Premature atrial/ventricular complexes, junctional rhythms detection
MULTILEVEL ANALYSIS

LEVEL 3

- Bradycardia/tachycardia indication
- LQTS (Long QT Syndrome) indication
- Atrial flutter vs Atrial fibrillation differentiation
- First degree AV block, Second degree AV block (Wenckebach, Mobitz) indication
- Conventional STEMI (ST-elevation myocardial infarction (MI)) indication
- Abnormalities in the QRS Axis indication
- MI localization evaluation: inferior, posterior, right ventricular, anterior, lateral, septal
- STEMI vs Hypertrophy differentiation
- Wellens’ Syndrome (Wellens’ Warning) detection [24-hours advance sign of possible MI and ECG manifestation of LAD coronary artery stenosis]
- Wolff-Parkinson-White syndrome
- RBBB (Right bundle branch block), LBBB detection
- Sgarbossa criteria evaluation
- HRV rhythm patterns analysis
- Non-linear HRV analysis (Poincare plots, CGSA, 1/f scaling, H scaling etc)
MULTILEVEL ANALYSIS

LEVEL 4

- HRV-based cardiovascular risk scoring
- Arrhythmia classification (I47.*-I49.*
- Combined with Lab results and patient’s medical history, ICD MI classification (I21.*, I22.*
- HRV frequency domain analysis of acute and survived MI cases, HRV-based risk assessment
- HRV signs of myocardial disfunction
- Drug-related heart conditions differentiation
- The Minnesota Code Classification System for ECG Findings implementation
- HRV-based evaluation for non-cardiac diseases
FAVOURITE TOOL OF ANY PHYSICIAN

- Ergonomic interface
- Multi language localisation support
- Visualisation tools
- Adjustable reports

* Please note, that images serve only as examples of visualisation abilities
Currently available solutions:

Biopac and other third-party software (Kubios, Corscience) are oriented on research, not business needs.

Other comparable options are pricey ($5000-$6000) and all have III-generation analytics capabilities, while we offer IV-generation (nosological & pre-nosological) diagnostics with 580 parameters.
Now the surgeon knows exactly what he’s doing

Unlike its EVLA and RFA counterparts, electro-welding technology provides biofeedback during operation. And it’s extremely valuable for surgeons since they can monitor intensity of their intervention.

30% Therapeutic Index increase. Greatly reduces operative and post-operative risks.
PRODUCTS: PLANEXTA ENDOVENOUS ELECTRIC WELDING

Status: working prototype already in use. Patent pending.

https://youtu.be/tRNXsRLIEQk
Endovenous laser surgery and RF ablation market size is 200M. And we are aiming to own 30% of it in 5 years. But the market for procedure itself is 100X bigger. This means huge potential for investment activity.
Problem
Currently clinics pay on average $30,000 for a laser device.

Solution
We offer them much more cost-effective, “no-threshold” option: to lease an entire “turn-key” solution and pay only a small percentage from every procedure cost. Planexta covers all aspects: technology, installation and doctor training.

Way to markets
Partnering with specialised medical companies that run medical device leasing business in US and Europe. For 60% of the cost of sales they will cover all necessary researches, regulatory procedures, manufacture and marketing.